

Amendments to the Claims

Claims 1-19. (Canceled)

Claim 20. (New) A wear protection coating, in particular an erosion protection coating for gas turbine components, which is applied to a to-be-protected surface of a flow mechanically stressed component, comprising an at least double-layer structure, wherein a first layer is applied to the to-be-protected surface of the component and has a material composition that is adapted to a material composition of the component, and wherein a second layer forms an outer cover coat.

Claim 21. (New) The wear protection coating according to Claim 20, wherein the first layer of the wear protection coating is comprised of a same or a similar material as the component.

Claim 22. (New) The wear protection coating according to Claim 20, wherein the first layer is porous and relatively soft.

Claim 23. (New) The wear protection coating according to Claim 20, wherein the first layer has damping properties.

Claim 24. (New) The wear protection coating according to Claim 20, wherein the first layer is applied directly to the to-be-protected surface of the component.

Claim 25. (New) The wear protection coating according to Claim 20, wherein the component is comprised of a titanium alloy and the first layer is comprised of a porous titanium alloy and wherein the component is a blade of a gas turbine.

Claim 26. (New) The wear protection coating according to Claim 20, wherein the component is comprised of a titanium-aluminum material and the first layer is comprised of a porous titanium-aluminum material.

Claim 27. (New) The wear protection coating according to Claim 20, wherein the second layer of the wear protection coating is relatively hard.

Claim 28. (New) The wear protection coating according to Claim 20, wherein the second layer is applied directly to the first layer.

Claim 29. (New) The wear protection coating according to Claim 20, wherein the second layer is comprised of a titanium-nitride material, an aluminum-nitride material or a titanium-aluminum-nitride material.

Claim 30. (New) A component, in particular a gas turbine component, with a wear protection coating, in particular with an erosion protection coating, which is applied to a to-be-protected surface of a flow mechanically stressed component, wherein the wear protection coating has an at least double-layer structure, wherein a first layer is applied to the to-be-protected surface of the component and has a material composition that is adapted to a material composition of the component, and wherein a second layer forms an outer cover coat.

Claim 31. (New) A method to manufacture a wear protection coating, in particular an erosion protection coating for gas turbine components, which is applied to a to-be-protected surface of a flow mechanically stressed component, comprising the steps of:

- a) making available the component comprised of a component material composition; and
- b) applying the wear protection coating to the to-be-protected surface of the component, wherein the wear protection coating has an at least double-layer structure, wherein a first layer is applied to the to-be-protected surface of the component and has a material composition that is adapted to a material composition of the component, and wherein a second layer forms an outer cover coat.

Claim 32. (New) The method according to Claim 31, wherein the first layer is applied directly to the to-be-protected surface of the component as a porous layer.

Claim 33. (New) The method according to Claim 31, wherein additives are incorporated into a material of the first layer and wherein the additives are vaporized thereby leaving behind pores within the first layer.

Claim 34. (New) The method according to Claim 31, wherein the first layer of the wear protection coating is applied by daubing, dipping or spraying as a slip material and is then hardened preferably by stove-enameling or aluminizing.

Claim 35. (New) The method according to Claim 31, wherein the first layer of the wear protection coating is applied with aid of a targeted matter vapor beam, in particular a PVD (Physical Vapor Deposition) matter beam.

Claim 36. (New) The method according to Claim 31, wherein the second layer is produced by evaporation coating or by nitration or by oxidizing or by aluminizing.

Claim 37. (New) The method according to Claim 36, wherein the second layer is applied directly to the first layer.

Claim 38. (New) A gas turbine component, comprising:
a surface; and
a wear protection coating applied to the surface, wherein the wear protection coating includes a first layer in contact with the surface and having a material composition that is adapted to a material composition of the surface, and a second layer applied to the first layer that forms an outer cover coat on the component.

Claim 39. (New) A method for wear protecting a component of a gas turbine, comprising the steps of:

applying a wear protection coating to a surface of the component, wherein the wear protection coating includes a first layer in contact with the surface and having a material composition that is adapted to a material composition of the surface, and a second layer applied to the first layer that forms an outer cover coat on the component.